

SHORT NOTES

Haplophragmoides yoshidai, a new name for a homonym of a Japanese foraminiferal species

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Abstract. *Haplophragmoides yoshidai* Hanagata nom. nov. is proposed as a replacement for *Haplophragmoides kushiroensis* Yoshida, 1963.

Key words: Foraminifera, *Haplophragmoides yoshidai*, homonym

Introduction

The species name *Haplophragmoides kushiroensis* Yoshida, 1963, is preoccupied by *H. kushiroensis* Asano, 1962 (Asano, 1962, p. 30, pl. 1, figs. 8a, b, 9a, b). Both *H. kushiroensis* Yoshida and *H. kushiroensis* Asano have an agglutinated planispiral involute test with interiomarginal aperture. Therefore, according to Loeblich and Tappan (1987) and Jones *et al.* (1993), both of them belong to the genus "*Haplophragmoides*." However, at the species level, they are differ in character of periphery, umbilical area, sutures and test size as shown in Table 1.

Systematic taxonomy

For suprageneric classification, Loeblich and Tappan (1987, 1992) is applied.

Class Foraminifera Lee, 1990
Order Lituolida Lankester, 1885
Superfamily Lituolacea de Blainville, 1827
Family Haplophragmoididae Maync, 1952
Genus *Haplophragmoides* Cushman, 1910

Haplophragmoides kushiroensis Asano

Haplophragmoides kushiroensis Asano, 1962, p. 30, pl. 1, figs. 8a, b, 9a, b.

Remarks: This species is described from the Charo Forma-

tion distributed in eastern Hokkaido. The geologic age of the Charo Formation is Oligocene (Okada and Kaiho, 1992).

Haplophragmoides yoshidai nom. nov.

Haplophragmoides kushiroensis Yoshida, 1963, p. 220, pl. II, figs. 1a, b, c, 2a, b, c.

Remarks: This species is a junior homonym of *H. kushiroensis* Asano. *Haplophragmoides kushiroensis* Yoshida was described from the Nemuro Group distributed in eastern Hokkaido, Japan. This species occurs throughout the Nemuro Group. According to the systematic description, the holotype was obtained from the Sempoishi Formation, whose geologic age is late Maastrichtian (Okada *et al.*, 1987). However, Yoshida writes in the plate explanation that the holotype is from the Akkeshi Formation, Nemuro Group, whose geologic age is Paleocene (Okada *et al.*, 1987). It has not been clarified which is the true holotype. Comparison of this species with similar ones is shown in Table 1. No other species is identical to *H. kushiroensis* Yoshida. Yasuda (1986) assigned the paratype (sic) of *H. kushiroensis* Yoshida (Yoshida, 1963, pl. II, figs. 1a, b, c, not 2a, b, c) to *H. obesus* Takayanagi (Takayanagi, 1960, p. 63, pl. 2, figs. 5a-6b). However, the paratype and holotype of *H. kushiroensis* Yoshida are obviously the same species, and as described by Yoshida (1963) himself, the species "... differs from *H. obesus* Takayanagi in having a greater number of chambers." Consequently, *H. obesus* Takayanagi is morphologically different from the "paratype" and "holotype" of *H. kushiroensis* Yoshida.

Table 1. Comparison of *Haplophragmoides yoshidai* nom. nov. with similar species based on original diagnosis.

	general shape	umbilicus	periphery	final whorl chambers	camber	suture	aperture	wall	Level
<i>H. kushiroensis</i> Asano, 1962	compressed	somewhat umbilicate	subacute	6-7	indistinct	indistinct	indistinct	medium to coarse-textured	Oligocene
<i>H. yoshidai</i> nom. nov. (<i>H. Kushiroensis</i> Yoshida, 1963)	nautiloid, globular	umbilicate	broadly rounded	6-8		depressed, sometimes obscured, almost straight	low arch opening at the base of the apertural face	roughly cemented	Maastrichtian to Paleocene
<i>H. tanaii</i> Kaiho, 1984	compressed	biumbilicate	subacute to somewhat rounded	6-7	slightly inflated	straight radial	interiomarginal equatorial arch	coarsely agglutinated	Eocene
<i>H. obesus</i> Takayanagi, 1960	subglobular, coarsely coiled	(completely involute)	very broadly rounded	5 (figured specimen)	inflated	not usually distinct, radial, slightly curved, very slightly depressed	low slit at base of apertural face	rather coarsely arenaceous	Lower to Upper Cretaceous
<i>Cribrostomoides cretacea</i> Cushman and Goudkoff, 1944	subglobular	involute, with a distinctly depressed umbilical region	broadly rounded	8-10	very slightly if at all inflated	fairly distinct, little if at all depressed	in adult with several pores along the base of the apertural face	very finely arenaceous	Coniacian to Maastrichtian
<i>H. renzi</i> Asano, 1950	compressed	involute	rounded but somewhat lobulate	7-8	slightly inflated	nearly radial, often indistinct	curved slit at the base of the apertural face	thick with much cement	Miocene to Pliocene
<i>H. subamakusaensis</i> Fukuta, 1962	wide	somewhat opened	broadly rounded	10-12	slightly inflated	fairly distinct	at base of apertural face	finely arenaceous	Eocene

References cited

- Asano, K. 1950 : Some Lituolidae from the Tertiary of Japan. *Contributions from the Cushman Foundation for Foraminiferal Research*, vol. 1, p. 75-79.
- Asano, K., 1962 : Japanese Paleogene from the view-point of foraminifera with description of several new species. *Contributions from the Institute of Geology and Paleontology, Tohoku University*, no. 57, p.1-32. (*in Japanese with abstract and description of new species in English*)
- Cushman, J.A. and Goudkoff, P.P., 1944 : Some Foraminifera from the Upper Cretaceous of California. *Contributions from the Cushman Laboratory for Foraminiferal Research*, vol. 20, p. 54.
- Fukuta, O., 1962 : Eocene foraminifera from the Kyoragi beds in Shimo-shima, Amakusa Islands, Kumamoto Prefecture, Kyushu, Japan. *Report, Geological Survey of Japan*, no. 194, p.1-31.
- Jones, R.W., Bender, H., Charnock, M.A., Kaminski, M.A. and Whittaker, J.E., 1993 : Emendation of the foraminiferal genus *Cribrostomoides* Cushman, 1910, and its taxonomic implications. *Journal of Micropalaeontology*, vol. 12, no. 2, p. 181-193.
- Kaiho, K., 1984 : Paleogene foraminifera from Hokkaido, Japan. Part 1. Lithostratigraphy and biostratigraphy including description of new species. *Science Reports of the Tohoku University, Second Series (Geology)*, vol. 54, no. 2, p. 95-139.
- Loeblich, A.R., Jr. and Tappan, H., 1987 : *Foraminiferal genera and their classification*. New York ; Van Nostrand Reinhold : 2 vols.
- Loeblich, A.R., Jr. and Tappan, H., 1992 : Present status of foraminiferal classification. *In*, Takayanagi, Y. and Saito, T., eds., *Studies in Benthic Foraminifera, BENTHOS '90, Sendai, 1990*, p. 93-102.
- Okada, H., Yamada, M., Matsuoka, H., Murota, T. and Isobe, T., 1987 : Calcareous nannofossils and biostratigraphy of the Upper Cretaceous and Lower Paleogene Nemuro Group, eastern Hokkaido, Japan. *Journal of the Geological Society of Japan*, vol. 93, no. 5, p. 329-348.
- Okada, H. and Kaiho, K., 1992 : Paleogene calcareous nannofossils from Hokkaido, Japan. *In*, Ishizaki, K. and Saito, T., eds., *Centenary of Japanese Micropaleontology*, Terra Scientific Publishing Company, Tokyo, p. 461-471.
- Takayanagi, Y., 1960 : Cretaceous Foraminifera from Hokkaido, Japan. *Science Reports of the Tohoku University, Second Series (Geology)*, vol. 32, no. 1, p. 1-154.
- Yasuda, H., 1986 : Cretaceous and Paleogene foraminifera from northern Hokkaido, Japan. *Science Reports of the Tohoku University, Second Series (Geology)*, vol. 57, no. 1, p. 1-101.
- Yoshida, S., 1963 : Upper Cretaceous Foraminifera from the Nemuro Group, eastern Hokkaido, Japan. *Journal of Hokkaido Gakugei University*, vol. 13, no. 2, p. 52-82.